

Air Quality PERMIT TO CONSTRUCT

State of Idaho Department of Environmental Quality **PERMIT No.:** P-060450

FACILITY ID No.: 031-00032

AQCR: 63

CLASS: SM

SIC: 2869

ZONE: 12

UTM COORDINATE (km): 270, 4,713

1	DEDM	TTTEE

Pacific Ethanol, Inc.

2. PROJECT

Fuel Grade Ethanol Production Plant

3. MAILING ADDRESS	CITY	STATE	ZIP
516 SE Morrison Street, Suite 580	Portland	Oregon	97214
4. FACILITY CONTACT	TITLE	TELEPHONE	
Harrison Pettit	Director of Business Development	(503) 235-8221	
5. RESPONSIBLE OFFICIAL	TITLE	TELEPHONE	
Tom Koehler	Vice President	(503) 235-8221	
6. EXACT PLANT LOCATION		COUNTY	
N 82628.4, E 79535.14		Cassia	

7. GENERAL NATURE OF BUSINESS & KINDS OF PRODUCTS

Fuel Grade Ethanol Production

8. GENERAL CONDITIONS

This permit is issued according to IDAPA 58.01.01.200, Rules for the Control of Air Pollution in Idaho, and pertains only to emissions of air contaminants regulated by the state of Idaho and to the sources specifically allowed to be constructed or modified by this permit.

This permit (a) does not affect the title of the premises upon which the equipment is to be located; (b) does not release the permittee from any liability for any loss due to damage to person or property caused by, resulting from, or arising out of the design, installation, maintenance, or operation of the proposed equipment; (c) does not release the permittee from compliance with other applicable federal, state, tribal, or local laws, regulations, or ordinances; (d) in no manner implies or suggests that the Department of Environmental Quality (DEQ) or its officers, agents, or employees, assume any liability, directly or indirectly, for any loss due to damage to person or property caused by, resulting from, or arising out of design, installation, maintenance, or operation of the proposed equipment.

This permit will expire if construction has not begun within two years of its issue date or if construction is suspended for one year.

This permit has been granted on the basis of design information presented with its application. Changes of design or equipment may require DEQ approval pursuant to the Rules for the Control of Air Pollution in Idaho, IDAPA 58.01.01.200, et seq.

DAN PITMAN, PERMIT WRITER DEPARTMENT OF ENVIRONMENTAL QUALITY	_		
MIKE SIMON, STATIONARY SOURCE PROGRAM MANAGER DEPARTMENT OF ENVIRONMENTAL QUALITY	DATE ISSUED:	PROPOSED	

Table of Contents

ACRO	NYMS, UNITS, AND CHEMICAL NOMENCLATURE	3
1.	PERMIT TO CONSTRUCT SCOPE	4
2.	EMISSIONS UNIT NAME	4
3.	PERMIT TO CONSTRUCT GENERAL PROVISIONS	21

Acronyms, Units, and Chemical Nomenclature

AFS AIRS Facility Subsystem

AIRS Aerometric Information Retrieval System

AQCR Air Quality Control Region

Btu British thermal unit

CFR Code of Federal Regulations

DEQ Department of Environmental Quality

dscf dry standard cubic feet

EPA U.S. Environmental Protection Agency

gpm gallons per minute

gr grain (1 lb = 7,000 grains)

IDAPA a numbering designation for all administrative rules in Idaho promulgated in accordance with

the Idaho Administrative Procedures Act

km kilometer

lb/hr pound per hour

m meter(s)
m³ cubic meter

MMBtu million British thermal units

NSPS New Source Performance Standards

PM particulate matter ppm parts per million

PSD Prevention of Significant Deterioration

PTC permit to construct

SIC Standard Industrial Classification

SM synthetic minor T/yr tons per year

UTM Universal Transverse Mercator

VOC volatile organic compound

AIR QUALITY PERMIT TO CONSTRUCT NUMBER: P-060450		
Permittee:	Pacific Ethanol, Inc.	Facility ID No. 031-00032
Location:	Burley, Idaho	Facility 1D 140. 031-00032

1. PERMIT TO CONSTRUCT SCOPE

Purpose

1.1 The purpose of this permit to construct is for the construction and operation of a fuel grade ethanol plant. The facility will produce 60 million gallons of undenatured ethanol and 63 million gallons of fuel grade denatured ethanol.

Regulated Sources

Table 1.1 lists all sources of regulated emissions in this PTC.

Table 1.1 SUMMARY OF REGULATED SOURCES

Emission Unit	Size or Capacity	Control Equipment	
Truck Dump Pit - Corn	20,000 Bushels/hr		
Rail Dump Pit - Corn	20,000 Bushels/hr		
3- Corn Conveyors	20,000 Bushels/hr	Corn Receiving Baghouse	
2- Corn Elevators	20,000 Bushels/hr		
Scalper	20,000 Bushels/hr		
2- Corn Bins	262,700 Bushels	Spot Filters	
Corn Surge Bin	1,200 Bushels	Surge Bin Spot Filters	
3- Hammermills	1,124 Bushels/hr	Hammermill Baghouse	
Liquefaction Tank	58,200 Gallons		
Yeast Tank	142,000 Gallons		
4- Fermenters	560,200 Gallons	Fermentation Scrubber & RTO	
Beerwell	729,400 Gallons		
De-gas	65,000 Gallons per hour		
Slurry Tank	11,000 Gallons		
Beer Stripper	26,000 Gallons		
Side Stripper	10,100 Gallons		
Rectifier Column	27,400 Gallons		
Molecular Sieve	5,708 Gallons		
200-Proof Condenser	7,050 Gallons/hr	V C C II P DTO	
Whole Stillage Tank	138,200 Gallons	Vent Gas Scrubber & RTO	
Process Condensate Tank	38,000 Gallons		
Evaporator	22,500 Gallons		
2-Centrifuge	7,050 Gallons/hr		
Syrup Tank	5,700 Gallons		
Thin Stillage Tank	102,000 Gallons		
Ethanol Truck Loadout	38,000 Gallons/hr	DTO	
Ethanol Rail Loadout	60,000 Gallons/hr	RTO	
3-Boilers	75.6 MMBtu/hr, Natural Gas	None	
190-Proof Tank	39,000 Gallons		
Denaturant Tank	74,300 Gallons	Internal Electine Deef	
2- 200 Proof Tanks	116,800 Gallons	Internal Floating Roof	
2- Denatured Ethanol Tanks	350,000 Gallons		
Cooling Towers		None	

AIR QUALITY PERMIT TO CONSTRUCT NUMBER: P-060450		
Permittee:	Pacific Ethanol, Inc.	English ID No. 021 00022
Location:	Burley, Idaho	Facility ID No. 031-00032

2. CORN RECEIVING, MILLING AND STORAGE

2.1 Process Description

Grain handling operations consist of unloading of corn by trucks or railcars at a maximum rate of 420 tons per hour, two corn storage bins and associated conveyors. The corn milling operations consist of a grain surge bin, a scalper and three hammermills.

2.2 Emissions Control Description

Table2.1 CORN HANDLING, MILLING AND STORAGE EQUIPMENT

Emissions Unit(s) / Process(es)	Emissions Control Device
Truck Dump Pit	
Rail Dump Pit	Corn Receiving Baghouse,
Corn Conveyors (3)	Manufacturer guarantee PM
Corn Elevators (2)	emissions of 0.005 gr/dscf or less
Scalper	
Corn Bins (2)	Spot Filters, Manufacturer guarantee
Corn Surge Bin	PM emissions of 0.01 gr/dscf or less
Hammermills (3)	Hammer Mill Baghouse,
	Manufacturer guarantee emissions of
	0.005 gr/dscf or less

Emissions Limits

2.3 Opacity Limit

Emissions from any other stack, vent, or functionally equivalent opening shall not exceed 20% opacity for a period or periods aggregating more than three minutes in any 60-minute period as required by IDAPA 58.01.01.625. Opacity shall be determined by the procedures contained in IDAPA 58.01.01.625.

2.4 Fugitive Emissions

All reasonable precautions shall be taken to prevent fugitive PM from becoming airborne in accordance with IDAPA 58.01.01.650-651.

Operating Requirements

2.5 Baghouse/Spot Filter PM Manufacturer Warranties

The permittee shall maintain on-site, and make available to DEQ representatives upon request, manufacturer guarantees stating that the corn receiving baghouse and hammermill baghouse will emit no PM more than 0.005 grains per dry standard cubic foot and that the Spot filters will emit no more PM than 0.01 grains per dry standard cubic foot.

AIR QUALITY PERMIT TO CONSTRUCT NUMBER: P-060450		
Permittee:	Pacific Ethanol, Inc.	Facility ID No. 021 00022
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2.6 Operations and Maintenance Manual

Within 60 days of permit issuance, the permittee shall have developed an Operations and Maintenance (O&M) manual for the corn receiving baghouse and Spot filters, which control the PM and PM₁₀ emissions from the grain handling, milling and storage operations. The O&M manual shall describe the procedures that will be followed to comply with General Provision 2 and the manufacturer guarantee specifications for the baghouses and Spot filters. The manual shall contain, at a minimum, requirements for quarterly inspections of the baghouses and Spot filters. The inspections shall include, but not be limited to, checking the bags or cartridges for structural integrity and that they are appropriately secured in place. The manual shall remain on-site at all times and shall be made available to DEQ representatives upon request.

The permittee shall operate the baghouses and Spot filters in accordance with the O&M manual.

Monitoring and Recordkeeping Requirements

2.7 Baghouse and Spot Filter Inspections

Records of the results of the quarterly baghouse and spot filter inspections shall be maintained on-site for a period of five years and be made available to DEQ representatives upon request. The records shall include at a minimum, the date of each inspection, description of the structural integrity of the bags/filters and a description of any maintenance or corrective action performed.

2.8 Reasonable Control Measures

The permittee shall conduct a quarterly facility-wide inspection of potential sources of fugitive emissions, during daylight hours and under normal operating conditions to ensure that the methods used to reasonably control fugitive emissions are effective. If fugitive emissions are not being reasonably controlled, the permittee shall take corrective action as expeditiously as practicable. The permittee shall maintain records of the results of each quarterly fugitive emissions inspection. The records shall include, at a minimum, the date of each inspection and a description of the following: the permittee's assessment of the conditions existing at the time fugitive emissions were present (if observed), any corrective action taken in response to the fugitive emissions, and the date the corrective action was taken.

2.9

AIR QUALITY PERMIT TO CONSTRUCT NUMBER: P-060450		
Permittee:	Pacific Ethanol, Inc.	Facility ID No. 021 00022
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Visible Emissions Monitoring

The permittee shall conduct a quarterly facility-wide inspection of the ethanol plant for visible emissions during daylight hours and under normal operating conditions. The visible emissions inspection shall consist of a see/no see evaluation. If any visible emissions are present from any point of emission, the permittee shall take appropriate corrective action as expeditiously as practicable. If the corrective action does not eliminate the visible emissions, then a Method 9 visible emissions observation must be conducted as soon as possible, but in no case later than 48 hours after the failure of the corrective action to remedy the visible emissions. A minimum of 30 observations shall be recorded when conducting the opacity test. If opacity is greater than 20% for a period or periods aggregating more than three minutes in any 60-minute period, the permittee shall take all necessary corrective action and report the exceedence in accordance with IDAPA 58.01.01.130-136. The permittee shall maintain records of the results of each visible emission inspection and each opacity test when conducted. The records shall include, at a minimum, the date and results of each inspection and test and a description of the following: the permittee's assessment of the conditions existing at the time visible emissions are present (if observed), any corrective action taken in response to the visible emissions, and the date corrective action was taken.

Records of this information shall be kept on-site for the most recent five-year period and shall be made available to DEQ representatives upon request.

AIR QUALITY PERMIT TO CONSTRUCT NUMBER: P-060450		
Permittee:	Pacific Ethanol, Inc.	Facility ID No. 031-00032
Location:	Burley, Idaho	Facility 1D 140. 031-00032

FERMENTATION, DISTILLATION & ETHANOL LOADOUT 3.

3.1 **Process Description**

The fermentation and distillation operations consist of a slurry tank, yeast tank, liquefaction tank, beerwell, de-gas vessel, three-column distillation unit, molecular sieve, 200 proof condenser, whole stillage tank, process condensate tank, thin stillage tank, syrup tank, evaporators, two centrifuges, and four fermenters.

Emissions Control Description 3.2

Emissions Control Device	
Emissions Control Device	
Fermentation Scrubber ¹ & RTO ²	
1	
Vent Gas Scrubber ¹ & RTO ²	
. 2	
RTO ²	

¹⁾ Delta-T Corporation Design, 98.5% removal of total organic compounds

²⁾ Nester, guaranteed 99% VOC destruction efficiency

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Emissions Limits

3.3 Regenerative Thermal Oxidizer (RTO) Emission Limits

The formaldehyde, acetaldehyde and VOC emissions from the RTO stack shall not exceed any corresponding emissions rate limits listed in Table 3.2.

Table 3.2 RTO EMISSIONS LIMITS

Source Description	Formaldehyde		voc	Acetaldehyde
	lb/hr ¹	lb/hr ¹	T/yr ²	lb/hr¹
RTO Stack	1.31E-3	5.32	23.3	1.26

¹⁾ As determined by an applicable source test method conducted in accordance with IDAPA 58.01.01.157.

Operating Requirements

3.4 Ethanol Production Limits

The permittee shall not produce more than 60 million gallons of undenatured ethanol and 63 million gallons of denatured ethanol per any consecutive 12-month period.

3.5 Process Gas Capture Requirements

- 3.5.1 Emissions from the following equipment shall be vented to the Fermentation Scrubber and then the RTO:
 - Liquefaction Tank
 - Yeast Tank
 - Fermenters (4)
 - Beerwell
 - De-gas Vessel
- 3.5.2 Emissions from the following equipment shall be vented to the Vent Gas Scrubber and then the RTO:
 - Slurry Tank
 - Beer Stripper
 - Side Stripper
 - Rectifier Column

²⁾ As determined by operating in compliance with the lb/hr emission rates and with the denatured ethanol production limits.

AIR QUALITY PERMIT TO CONSTRUCT NUMBER: P-060450		
Permittee:	Pacific Ethanol, Inc.	Engility ID No. 021 00022
Location:	Burley, Idaho	Facility ID No. 031-00032

- Molecular Sieve
- 200-Proff Condenser
- Whole Stillage Tank
- Process Condensate Tank
- Evaporator
- Centrifuge (2)
- Syrup Tank
- Thin Stillage Tank

3.6 Ethanol Load-out Requirements

- 3.6.1 Denatured ethanol loadout to either railcar or truck shall be by submerged loading.
- 3.6.2 All vapors displaced during either railcar or truck loading shall be vented to the RTO.

3.7 <u>Fermentation and Vent Gas Scrubber Requirements</u>

- 3.7.1 The Fermentation and Vent Gas Scrubber shall:
 - Use fresh water as a scrubbing liquid
 - Discharge scrubbing liquid to the slurry tank
 - Be equipped with scrubbing water flow-rate monitors
- 3.7.2 Fresh water flow-rate to the Fermentation Scrubber shall not be less than 125 gallons per minute and fresh water flow-rate to the Vent Gas Scrubber shall not be less than 25 gallons per minute.

3.8 RTO Requirements

The RTO oxidation temperature shall not be less than 1,500 degrees Fahrenheit.

Monitoring and Recordkeeping Requirements

3.9 Operating Parameters

The following parameters shall be monitored and recorded. The records shall be maintain on-site for a period of five years and be made available to DEQ representatives upon request.

3.9.1 The gallons of undenatured and denatured ethanol produced in any consecutive 12-month period. Each month the permittee shall record the amounts for that month and for the most recent consecutive 12-month period.

	AIR QUALITY PERMIT TO CONSTRUCT NUMBER: P-060450		
Permittee:	Pacific Ethanol, Inc.	Facility ID No. 031-00032	
Location:	Burley, Idaho	Facility 1D 140. 031-00032	

- 3.9.2 Fresh water flow-rate to the Fermentation Scrubber and Vent Gas Scrubber shall be monitored and recorded in gallons per minute once each week.
- 3.9.3 The permittee shall continuously monitor and record the temperature of the RTO oxidation chamber.

3.10 Performance Test

- 3.10.1 Within 60 days after achieving the maximum production rate at which the Ethanol Plant will be operated, but not later than 180 days after initial startup, the permittee shall conduct performance test in accordance with IDAPA 58.01.01.157 to demonstrate compliance with the pound per hour formaldehyde, acetaldehyde and VOC emission rate limits in Permit Condition 3.2.
- 3.10.2 The permittee shall conduct a performance test each five years after the initial performance test.

AIR QUALITY PERMIT TO CONSTRUCT NUMBER: P-060450		
Permittee:	Pacific Ethanol, Inc.	Facility ID No. 031-00032
Location:	Burley, Idaho	Facility 1D No. 031-00032

4. BOILERS

4.1 Process Description

Steam will be produced in three 75.6 MMBtu/hr natural gas fired boilers. The boilers make, model and manufacture date are unknown. Emissions are uncontrolled.

Emissions Limits

4.2 <u>Standards for Particulate Matter</u>

- 4.2.1 On or after the date on which the initial performance test is required to be complete under 40 CFR 60.8 for steam generating units constructed or modified on or after February 28, 2005 particulate matter emissions shall not be in excess of 0.030 lb/MMBtu heat input in accordance with 40 CFR 60.43c(e)(1). Should there be a conflict between 40 CFR 60.43c and Permit Condition 4.2.1, 40 CFR 60.43c shall govern.
- 4.2.2 Particulate matter (PM) emissions from any boiler stack shall not exceed 0.015 grains per dry standard cubic foot (gr/dscf) of effluent gas corrected to 3% oxygen by volume when combusting gas in accordance with IDAPA 58.01.01.676.

Operating Requirements

4.3 Fuel Type Restriction

The boilers shall be fired on natural gas exclusively.

4.4 NSPS Applicability Determination

In order to determine applicability of 40 CFR 60.43c (Permit Condition 4.2.1) the permitee shall maintain records on-site of the date of construction (i.e. fabrication) or modification of the boilers and their maximum rated input capacity.

Monitoring and Recordkeeping Requirements

4.5 40 CFR 60.45 Compliance and Performance Test Methods

In accordance with 40 CFR 60.45c(a), the operator of an affected facility shall:

	AIR QUALITY PERMIT TO CONSTRUCT NUMBER: P-060450		
Permittee:	Pacific Ethanol, Inc.	Facility ID No. 021 00022	
Location:	Burley, Idaho	Facility ID No. 031-00032	

- 4.5.1 Conduct an initial performance test as required under 40 CFR 60.8 to demonstrate compliance with the particulate matter standards of 40 CFR 60.43c (i.e. Permit Condition 4.2.1), or
- 4.5.2 As an alternative shall only combust gaseous fuels with potential sulfur dioxide emission rates of 0.54 lb/MMBtu heat input are not required to conduct a performance test provided fuel supplier certification of the sulfur content of fuels burned is maintained.
- 4.5.3 Should there be a conflict between 40 CFR 60.43c and Permit Condition 4.5, 40 CFR 60.43c shall govern.

AIR QUALITY PERMIT TO CONSTRUCT NUMBER: P-060450		
Permittee:	Pacific Ethanol, Inc.	Englists ID No. 021 00022
Location:	Burley, Idaho	Facility ID No. 031-00032

5. STORAGE TANKS

5.1 Process Description

190 proof ethanol will be stored in one tank prior to entering the molecular sieves. Denaturant used to blend with the ethanol product will be stored in one tank. Two anhydrous (200-proof) ethanol tanks will be used to store finished ethanol prior to blending with denaturant and shipment. Denatured ethanol will be stored in two tanks. Emissions from the tanks are controlled by internal floating roofs.

Table 5.1 STORAGE TANKS

Emissions Unit	Emissions Control Device
190-Proof Tank	
(39,000 Gallons, 442 m ³)	
Denaturant Tank	
(each 74,300 Gallons, 281.2 m ³)	Internal Electine Deef
2- 200 Proof Tanks	Internal Floating Roof
(each 116,800 Gallons, 442 m ³)	
2- Denatured Ethanol Tanks	
(each 350,000 Gallons, 1892.7 m ³)	

Operating Requirements

5.2 40 CFR 60.112b Standard for Volatile Organic Compounds (VOC)

The owner or operator of each storage vessel either with a design capacity greater than or equal to 151 m³ containing a volatile organic liquid that, as stored, has a maximum true vapor pressure equal to or greater than 5.2 kPa but less than 76.6 kPa shall equip the storage vessel with one of the emission control strategies specified 40 CFR 60.112b(a) (i.e. install a fixed roof tank with and internal floating roof). For fixed roof tanks in combination with an internal floating roof the following requirements shall apply in accordance with 40 CFR 60.112b(a)(1):

- 5.2.1 The internal floating roof shall rest or float on the liquid surface (but not necessarily in complete contact with it) inside a storage vessel that has a fixed roof. The internal floating roof shall be floating on the liquid surface at all times, except during initial fill and during those intervals when the storage vessel is completely emptied or subsequently emptied and refilled. When the roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as rapidly as possible.
- 5.2.2 Each internal floating roof shall be equipped with one of the following closure devices between the wall of the storage vessel and the edge of the internal floating roof:
 - (A) A foam- or liquid-filled seal mounted in contact with the liquid (liquid-mounted seal). A liquid-mounted seal means a foam- or liquid-filled seal mounted in contact with the liquid between the wall of the storage vessel and the floating roof continuously around the circumference of the tank.

AIR QUALITY PERMIT TO CONSTRUCT NUMBER: P-060450		
Permittee:	Pacific Ethanol, Inc.	Facility ID No. 031-00032
Location:	Burley, Idaho	Facility 1D No. 031-00032

- (B) Two seals mounted one above the other so that each forms a continuous closure that completely covers the space between the wall of the storage vessel and the edge of the internal floating roof. The lower seal may be vapor-mounted, but both must be continuous.
- (C) A mechanical shoe seal. A mechanical shoe seal is a metal sheet held vertically against the wall of the storage vessel by springs or weighted levers and is connected by braces to the floating roof. A flexible coated fabric (envelope) spans the annular space between the metal sheet and the floating roof.
- 5.2.3 Each opening in a noncontact internal floating roof except for automatic bleeder vents (vacuum breaker vents) and the rim space vents is to provide a projection below the liquid surface.
- 5.2.4 Each opening in the internal floating roof except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, and stub drains is to be equipped with a cover or lid which is to be maintained in a closed position at all times (i.e., no visible gap) except when the device is in actual use. The cover or lid shall be equipped with a gasket. Covers on each access hatch and automatic gauge float well shall be bolted except when they are in use.
- 5.2.5 Automatic bleeder vents shall be equipped with a gasket and are to be closed at all times when the roof is floating except when the roof is being floated off or is being landed on the roof leg supports.
- 5.2.6 Rim space vents shall be equipped with a gasket and are to be set to open only when the internal floating roof is not floating or at the manufacturer's recommended setting.
- 5.2.7 Each penetration of the internal floating roof for the purpose of sampling shall be a sample well. The sample well shall have a slit fabric cover that covers at least 90 percent of the opening.
- 5.2.8 Each penetration of the internal floating roof that allows for passage of a column supporting the fixed roof shall have a flexible fabric sleeve seal or a gasketed sliding cover.
- 5.2.9 Each penetration of the internal floating roof that allows for passage of a ladder shall have a gasketed sliding cover.
- 5.2.10 Should there be a conflict between Section 5.2 of this permit and 40 CFR 60.112b, 40 CFR 60.112b shall govern.

Monitoring, Reporting and Recordkeeping Requirements

5.3 40 CFR 60.113b Testing and Procedures

After installing the control equipment required to meet §60.112b(a)(1) (permanently affixed roof and internal floating roof), each owner or operator shall:

5.3.1 Visually inspect the internal floating roof, the primary seal, and the secondary seal (if one is in service), prior to filling the storage vessel with VOL. If there are holes, tears, or other openings in the primary seal, the secondary seal, or the seal fabric or defects in the internal floating roof, or both, the owner or operator shall repair the items before filling the storage vessel.

AIR QUALITY PERMIT TO CONSTRUCT NUMBER: P-060450		
Permittee:	Pacific Ethanol, Inc.	English ID No. 021 00022
Location:	Burley, Idaho	Facility ID No. 031-00032

- 5.3.2 For Vessels equipped with a liquid-mounted or mechanical shoe primary seal, visually inspect the internal floating roof and the primary seal or the secondary seal (if one is in service) through manholes and roof hatches on the fixed roof at least once every 12 months after initial fill. If the internal floating roof is not resting on the surface of the VOL inside the storage vessel, or there is liquid accumulated on the roof, or the seal is detached, or there are holes or tears in the seal fabric, the owner or operator shall repair the items or empty and remove the storage vessel from service within 45 days. If a failure that is detected during inspections required in this paragraph cannot be repaired within 45 days and if the vessel cannot be emptied within 45 days, a 30-day extension may be requested from the Department in the inspection report required in \$60.115b(a)(3). Such a request for an extension must document that alternate storage capacity is unavailable and specify a schedule of actions the company will take that will assure that the control equipment will be repaired or the vessel will be emptied as soon as possible.
- 5.3.3 For vessels equipped with a double-seal system as specified in Permit Condition 5.2.2(B):
 - Visually inspect the vessel as specified in Permit Condition 5.3.4 at least every 5 years; or
 - Visually inspect the vessel as specified in Permit Condition 5.3.2
- 5.3.4 Visually inspect the internal floating roof, the primary seal, the secondary seal (if one is in service), gaskets, slotted membranes and sleeve seals (if any) each time the storage vessel is emptied and degassed. If the internal floating roof has defects, the primary seal has holes, tears, or other openings in the seal or the seal fabric, or the secondary seal has holes, tears, or other openings in the seal or the seal fabric, or the gaskets no longer close off the liquid surfaces from the atmosphere, or the slotted membrane has more than 10 percent open area, the owner or operator shall repair the items as necessary so that none of the conditions specified in this paragraph exist before refilling the storage vessel with VOL. In no event shall inspections conducted in accordance with this provision occur at intervals greater than 10 years in the case of vessels conducting the annual visual inspection as specified in Permit Condition 5.3.2 of this section and at intervals no greater than 5 years in the case of vessels equipped with a double seal system.
- 5.3.5 Notify the Department in writing at least 30 days prior to the filling or refilling of each storage vessel for which an inspection is required by Permit Condition 5.3.1 and 5.3.4 to afford the Department the opportunity to have an observer present. If the inspection required Permit Condition 5.3.4 is not planned and the owner or operator could not have known about the inspection 30 days in advance or refilling the tank, the owner or operator shall notify the Department at least 7 days prior to the refilling of the storage vessel. Notification shall be made by telephone immediately followed by written documentation demonstrating why the inspection was unplanned. Alternatively, this notification including the written documentation may be made in writing and sent by express mail so that it is received by the Department at least 7 days prior to the refilling.

5.4 40 CFR 60.115b Reporting and Recordkeeping Requirements

After installing control equipment in accordance with §60.112b(a)(1) (fixed roof and internal floating roof), the owner or operator shall meet the following requirements.

AIR QUALITY PERMIT TO CONSTRUCT NUMBER: P-060450		
Permittee:	Pacific Ethanol, Inc.	Facility ID No. 031-00032
Location:	Burley, Idaho	Facility 1D 100. 031-00032

- 5.4.1 Furnish the Department with a report that describes the control equipment and certifies that the control equipment meets the specifications of Permit Condition 5.2 and 5.3. This report shall be an attachment to the notification of actual facility startup required by §60.7(a)(3).
- 5.4.2 Keep a record of each inspection performed as required by Permit Condition 5.3. Each record shall identify the storage vessel on which the inspection was performed and shall contain the date the vessel was inspected and the observed condition of each component of the control equipment (seals, internal floating roof, and fittings).
- 5.4.3 If any of the conditions described in Permit Condition 5.3.2 are detected during the annual visual inspection required by Permit Condition 5.3.2, a report shall be furnished to the Department within 30 days of the inspection. Each report shall identify the storage vessel, the nature of the defects, and the date the storage vessel was emptied or the nature of and date the repair was made.
- 5.4.4 After each inspection required by Permit Condition 5.3.3 that finds holes or tears in the seal or seal fabric, or defects in the internal floating roof, or other control equipment defects listed in Permit Condition 5.3.2, a report shall be furnished to the Department within 30 days of the inspection. The report shall identify the storage vessel and the reason it did not meet the specifications of Permit Condition 5.2 and list each repair made.

5.5 40 CFR 60.116b Monitoring of Operations

The permittee shall monitor affected facility operations in accordance with 40 CFR 60.116b as summarized by permit conditions 5.5.1 through 5.5.4. The Permittee shall keep records on-site for a period of five years (in accordance with Permit to Construct General Provision 7) and the records shall be readily available to Department representatives upon request, except records required by Permit Condition 5.5.1 shall be kept for the life of the source in accordance with 40 CFR 60.116b(a).

- 5.5.1 The owner or operator of each volatile organic storage vessel with a storage volume greater than 75 m³ shall keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel.
- 5.5.2 The owner or operator of each storage vessel either with a design capacity greater than or equal to 151 m³ storing a liquid with a maximum true vapor pressure greater than or equal to 3.5 kPa or with a design capacity greater than or equal to 75 m³ but less than 151 m³ storing a liquid with a maximum true vapor pressure greater than or equal to 15.0 kPa shall maintain a record of the VOL stored, the period of storage, and the maximum true vapor pressure of that VOL during the respective storage period.
- 5.5.3 The owner or operator of each storage vessel either with a design capacity greater than or equal to 151 m³ storing a liquid with a maximum true vapor pressure that is normally less than 5.2 kPa or with a design capacity greater than or equal to 75 m³ but less than 151 m³ storing a liquid with a maximum true vapor pressure that is normally less than 27.6 kPa shall notify the Department within 30 days when the maximum true vapor pressure of the liquid exceeds the respective maximum true vapor pressure values for each volume range.

AIR QUALITY PERMIT TO CONSTRUCT NUMBER: P-060450		
Permittee:	Pacific Ethanol, Inc.	Facility ID No. 031-00032
Location:	Burley, Idaho	Facility 1D 110. 031-00032

5.5.4 The true vapor pressure of the volatile organic liquid shall be determined in accordance with 40 CFR 60.116b(e).

AIR QUALITY PERMIT TO CONSTRUCT NUMBER: P-060450		
Permittee:	Pacific Ethanol, Inc.	English ID No. 021 00022
Location:	Burley, Idaho	Facility ID No. 031-00032

6. PUMPS, COMPRESSORS, VALVES, FLANGES, ETC.

6.1 Process Description

All equipment (pumps, compressors, valves and flanges, etc.) that are assembled to produce ethanol are subject to *Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry* (40 CFR 60.480).

Operating Requirements

6.2 Operating Standards 40 CFR 60.482-1 through 60.482-10

The permittee shall demonstrate compliance with the requirements of 40 CFR 60.482-1 through 60.482-10 within 180 days of initial startup of the affected facility. These requirements include, but are not limited to sampling, leak detection, repair and equipment specifications (seals, sensors, vapor recovery, etc.).

Monitoring and Recordkeeping Requirements

6.3 Test Methods and Procedures 40 CFR 60.485

The permittee shall comply with the Test Methods and Procedures specified by 40 CFR 60.485. These requirements include but are not limited to specifying compliance test methods and procedures for leak detection.

6.4 Recordkeeping Requirements

The permittee shall comply with the Recordkeeping Requirements specified by 40 CFR 60.486. The requirements include but are not limited to collecting information in a log regarding repairs, dates of startup and shutdown, a listing of equipment that is subject to 40 CFR 60.480, design specifications, dates of compliance tests, etc.

Reporting Requirements

6.5 Reporting Requirements 40 CFR 60.487

The permittee shall comply with the Reporting Requirements specified by 40 CFR 60.487. Reports are required semiannually.

AIR QUALITY PERMIT TO CONSTRUCT NUMBER: P-060450		
Permittee:	Pacific Ethanol, Inc.	Facility ID No. 021 00022
Location:	Burley, Idaho	Facility ID No. 031-00032

- 6.5.1 The initial semiannual report shall include, but not be limited to, the following:
 - Process unit identification (Process unit is defined 40 CFR 60.481)
 - The number of valves subject to 40 CFR 60.482-7
 - The number of pumps subject to 40 CFR 60.482-2
 - The number of compressors subject to 40 CFR 60.482-3
- 6.5.2 All semiannual reports shall include, but not be limited to, the following:
 - Process unit identification (Process unit is defined 40 CFR 60.481)
 - For each month during the semiannual reporting period report the number of valves, pumps and compressors that leaked and the number for which leaks were not repaired
 - Dates of process unit shutdowns
 - Revisions to process units identified in the initial semiannual report
 - Report the results of all performance tests
- 6.5.3 Should there be a conflict between Permit Condition 6.5 and 40 CFR 60.480, 40 CFR 60.480 shall govern.

AIR QUALITY PERMIT TO CONSTRUCT NUMBER: P-060450		
Permittee:	Pacific Ethanol, Inc.	Facility ID No. 031-00032
Location:	Burley, Idaho	Facility 1D No. 031-00032

7. PERMIT TO CONSTRUCT GENERAL PROVISIONS

General Compliance

1. The permittee has a continuing duty to comply with all terms and conditions of this permit. All emissions authorized herein shall be consistent with the terms and conditions of this permit and the Rules for the Control of Air Pollution in Idaho. The emissions of any pollutant in excess of the limitations specified herein, or noncompliance with any other condition or limitation contained in this permit, shall constitute a violation of this permit and the Rules for the Control of Air Pollution in Idaho, and the Environmental Protection and Health Act, Idaho Code §39-101, et seq.

[Idaho Code §39-101, et seq.]

2. The permittee shall at all times (except as provided in the Rules for the Control of Air Pollution in Idaho) maintain in good working order and operate as efficiently as practicable, all treatment or control facilities or systems installed or used to achieve compliance with the terms and conditions of this permit and other applicable Idaho laws for the control of air pollution.

[IDAPA 58.01.01.211, 5/1/94]

3. Nothing in this permit is intended to relieve or exempt the permittee from the responsibility to comply with all applicable local, state, or federal statutes, rules and regulations.

[IDAPA 58.01.01.212.01, 5/1/94]

Inspection and Entry

- 4. Upon presentation of credentials, the permittee shall allow DEQ or an authorized representative of DEQ to do the following:
 - a. Enter upon the permittee's premises where an emissions source is located or emissions related activity is conducted, or where records are kept under conditions of this permit;
 - b. Have access to and copy, at reasonable times, any records that are kept under the conditions of this permit;
 - c. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit; and
 - d. As authorized by the Idaho Environmental Protection and Health Act, sample or monitor, at reasonable times, substances or parameters for the purpose of determining or ensuring compliance with this permit or applicable requirements.

[Idaho Code §39-108]

Construction and Operation Notification

- 5. The permittee shall furnish DEQ written notifications as follows in accordance with IDAPA 58.01.01.211:
 - a. A notification of the date of initiation of construction, within five working days after occurrence;
 - b. A notification of the date of any suspension of construction, if such suspension lasts for one year or more;

AIR QUALITY PERMIT TO CONSTRUCT NUMBER: P-060450		
Permittee:	Pacific Ethanol, Inc.	Engility ID No. 021 00022
Location:	Burley, Idaho	Facility ID No. 031-00032

- c. A notification of the anticipated date of initial start-up of the stationary source or facility not more than sixty days or less than thirty days prior to such date;
- d. A notification of the actual date of initial start-up of the stationary source or facility within fifteen days after such date; and
- e. A notification of the initial date of achieving the maximum production rate, within five working days after occurrence production rate and date.

[IDAPA 58.01.01.211, 5/1/94]

Performance Testing

6. If performance testing (air emissions source test) is required by this permit, the permittee shall provide notice of intent to test to DEQ at least 15 days prior to the scheduled test date or shorter time period as approved by DEQ. DEQ may, at its option, have an observer present at any emissions tests conducted on a source. DEQ requests that such testing not be performed on weekends or state holidays.

All performance testing shall be conducted in accordance with the procedures in IDAPA 58.01.01.157. Without prior DEQ approval, any alternative testing is conducted solely at the permittee's risk. If the permittee fails to obtain prior written approval by DEQ for any testing deviations, DEQ may determine that the testing does not satisfy the testing requirements. Therefore, at least 30 days prior to conducting any performance test, the permittee is encouraged to submit a performance test protocol to DEQ for approval. The written protocol shall include a description of the test method(s) to be used, an explanation of any or unusual circumstances regarding the proposed test, and the proposed test schedule for conducting and reporting the test.

Within 30 days following the date in which a performance test required by this permit is concluded, the permittee shall submit to DEQ a performance test report. The written report shall include a description of the process, identification of the test method(s) used, equipment used, all process operating data collected during the test period, and test results, as well as raw test data and associated documentation, including any approved test protocol.

[IDAPA 58.01.01.157, 4/5/00]

Monitoring and Recordkeeping

7. The permittee shall maintain sufficient records to ensure compliance with all of the terms and conditions of this permit. Records of monitoring information shall include, but not be limited to the following: (a) the date, place, and times of sampling or measurements; (b) the date analyses were performed; (c) the company or entity that performed the analyses; (d) the analytical techniques or methods used; (e) the results of such analyses; and (f) the operating conditions existing at the time of sampling or measurement. All monitoring records and support information shall be retained for a period of at least five years from the date of the monitoring sample, measurement, report, or application. Supporting information includes, but is not limited to, all calibration and maintenance records and all original stripchart recordings for continuous monitoring instrumentation and copies of all reports required by this permit. All records required to be maintained by this permit shall be made available in either hard copy or electronic format to DEO representatives upon request.

[IDAPA 58.01.01.211, 5/1/94]

Excess Emissions

AIR QUALITY PERMIT TO CONSTRUCT NUMBER: P-060450		
Permittee:	Pacific Ethanol, Inc.	Facility ID No. 031-00032
Location:	Burley, Idaho	Facility 1D No. 031-00032

8. The permittee shall comply with the procedures and requirements of IDAPA 58.01.01.130-136 for excess emissions due to startup, shutdown, scheduled maintenance, safety measures, upsets and breakdowns.

[IDAPA 58.01.01.130-136, 4/5/00]

Certification

9. All documents submitted to DEQ, including, but not limited to, records, monitoring data, supporting information, requests for confidential treatment, testing reports, or compliance certification shall contain a certification by a responsible official. The certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document(s) are true, accurate, and complete.

[IDAPA 58.01.01.123, 5/1/94]

False Statements

10. No person shall knowingly make any false statement, representation, or certification in any form, notice, or report required under this permit, or any applicable rule or order in force pursuant thereto.

[IDAPA 58.01.01.125, 3/23/98]

Tampering

11. No person shall knowingly render inaccurate any monitoring device or method required under this permit or any applicable rule or order in force pursuant thereto.

[IDAPA 58.01.01.126, 3/23/98]

Transferability

12. This permit is transferable in accordance with procedures listed in IDAPA 58.01.01.209.06. [IDAPA 58.01.01.209.06, 4/11/06]

Severability

13. The provisions of this permit are severable, and if any provision of this permit to any circumstance is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.